

Client's ref.: TSMC2003-1012/PE:SimonLu

Our ref.: 0503-A30093-USf/Yianhou/Steve/Nelson

What Is Claimed Is:

- 1 1. A system for capacity management, comprising:
2 an order management module to receive at least a first order
3 having a period delivery demand directing a supplier
4 to deliver products corresponding to the order before
5 the end of the period; and
6 a pull-in engine to receive a second order with a pull-in
7 demand, push out the first order, and direct capacity
8 reserved for the first order to meet the second order.
- 1 2. The system of claim 1 further comprising an allocation
2 module to allocate additional capacity for the first order.
- 1 3. The system of claim 2 further comprising a planning
2 module to generate a new manufacturing planning schedule and
3 delivery dates for the first order and second order.
- 1 4. The system of claim 1 wherein the first order further
2 has a billing condition directing the supplier to generate a bill
3 for the first order as late as possible.

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1 5. A method for capacity management, comprising the
2 steps of:

3 receiving at least a first order having a period delivery
4 demand, in which the period delivery demand directs
5 a supplier to deliver products corresponding to the
6 order before the end of the period;

7 receiving a second order with a pull-in demand; and
8 pushing out the first order, and directing capacity
9 reserved for the first order to meet the second order.

1 6. The method of claim 5 further comprising allocating
2 additional capacity for the first order.

1 7. The method of claim 6 further comprising generating
2 a new manufacturing planning schedule and delivery dates for the
3 first order and second order.

1 8. The method of claim 5 wherein the first order further
2 has a billing condition directing the supplier to generate a bill
3 for the first order as late as possible.

1 9. A system for capacity management, comprising:

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2 an order management module to receive at least a first order
3 having a period delivery demand, in which the period
4 delivery demand directs a supplier to deliver
5 products corresponding to the order before the end
6 of the period; and
7 a pull-in engine to push out the first order, and direct
8 capacity reserved for the first order to meet other
9 orders if a production event occurs.

1 10. The system of claim 9 further comprising an allocation
2 module to allocate additional capacity for the first order.

1 11. The system of claim 10 further comprising a planning
2 module to generate a new manufacturing planning schedule and a
3 delivery date for the first order.

1 12. The system of claim 9 wherein the first order further
2 has a billing condition directing the supplier to generate a bill
3 for the first order as late as possible.

1 13. A method for capacity management, comprising the
2 steps of:

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3 receiving at least a first order having a period delivery
4 demand, in which the period delivery demand directs
5 a supplier to deliver products corresponding to the
6 order before the end of the period; and
7 pushing out the first order, and directing capacity
8 reserved for the first order to meet another order
9 if a production event occurs.

1 14. The method of claim 13 further comprising allocating
2 another capacity for the first order.

1 15. The method of claim 14 further comprising generating
2 a new manufacturing planning schedule and a delivery date for
3 the first order.

1 16. The method of claim 13 wherein the first order further
2 has a billing condition directing the supplier to generate a bill
3 for the first order as late as possible.

1 17. A method for capacity management, comprising the
2 steps of:

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3 separating orders based on respective corresponding
4 delivery demand, thus identifying orders of a first
5 type, in which orders of the first type direct a
6 supplier to deliver products before the end of a
7 period; and
8 selecting at least one of the orders of the first type to
9 be pushed out if another order with a pull-in demand
10 is received or a production event occurs.

1 18. The method of claim 17 further comprising allocating
2 additional capacity for the pushed out order.

1 19. The method of claim 18 further comprising generating
2 a new manufacturing planning schedule and a delivery date for
3 the pushed out order.

1 20. The method of claim 13 further comprising separating
2 the orders based on a respective corresponding billing condition
3 directing the supplier to generate a bill for the first order
4 as late as possible.

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1 21. A machine-readable storage medium storing a computer
2 program which when executed causes a computer to perform a
3 capacity management method, the method comprising the steps of:

4 receiving at least a first order having a period delivery
5 demand, in which the period delivery demand directs
6 a supplier to deliver products corresponding to the
7 order before the end of the period;

8 receiving a second order with a pull-in demand; and
9 pushing out the first order, and directing capacity
10 reserved for the first order to meet the second order.

1 22. The storage medium of claim 21 wherein the method
2 further comprises a step of allocating additional capacity for
3 the first order.

1 23. The storage medium of claim 22 wherein the method
2 further comprises a step of generating a new manufacturing
3 planning schedule and delivery dates for the first order and
4 second order.

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1 24. The storage medium of claim 21 wherein the first order
2 further has a billing condition directing the supplier to
3 generate a bill for the first order as late as possible.

1 25. A machine-readable storage medium storing a computer
2 program which when executed causes a computer to perform a
3 capacity management method, the method comprising the steps of:

4 receiving at least a first order having a period delivery

5 demand, in which the period delivery demand directs

6 a supplier to deliver products corresponding to the

7 order before the end of the period; and

8 pushing out the first order, and directing capacity

9 reserved for the first order to meet other order if

10 a production event occurs.

1 26. The storage medium of claim 25 wherein the method
2 further comprises a step of allocating additional capacity for
3 the first order.

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1 27. The storage medium of claim 26 wherein the method
2 further comprises a step of generating a new manufacturing
3 planning schedule and a delivery date for the first order.

1 28. The storage medium of claim 25 wherein the first order
2 further has a billing condition directing the supplier to
3 generate a bill for the first order as late as possible.

1 29. A machine-readable storage medium storing a computer
2 program which when executed causes a computer to perform a
3 capacity management method, the method comprising the steps of:

4 separating orders based on respective corresponding
5 delivery demands, thus identifying orders of a first
6 type, in which the orders of the first type indicate
7 a supplier to deliver products before the end of a
8 period; and

9 selecting at least one of the orders of the first type to

10 be pushed out if another order with a pull-in demand

11 is received or a production event occurs.

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1 30. The storage medium of claim 29 wherein the method
2 further comprises a step of allocating additional capacity for
3 the pushed out order.

1 31. The storage medium of claim 30 wherein the method
2 further comprises a step of generating a new manufacturing
3 planning schedule and a delivery date for the pushed out order.

1 32. The storage medium of claim 29 wherein the method
2 further comprises a step of separating the orders based on a
3 respective corresponding billing condition directing the
4 supplier to generate a bill for the first order as late as
5 possible.